

Document type	Technical Data Sheet
Name	MARMORINO MEDIUM GREEN LINE
Description	<p>Natural, lime-based material for decorative finishes on interior and exterior wall surfaces. Naturally anti-mould and breathable. This Venetian plaster has medium-grain size, and therefore medium gloss and trowel movements, with gentle chiaroscuro effects.</p> <p>What sets MARMORINO MEDIUM GREEN LINE apart is its commitment to being an entirely natural and eco-friendly product. Unlike the standard version, this unique formulation replaces synthetic additives, which typically account for 2.5% of the material's weight, with natural ingredients: vegetable starches and milk derivatives, such as casein, are used as binders. This version comes in powder form to avoid using preservatives.</p>
Composition	Hydrated lime and selected marble powders
Grain size	400 microns
Appearance	Powder
Colour	White, it can be tinted in any colour with lime-compatible colourants
Packaging	16 kg net polyethylene containers
Application	By hand, with a steel trowel
Type of Surface and priming	<p>Interior and exterior walls. Also suitable for walls of wet areas such as showers and saunas.</p> <p><u>New Wall Surface</u> Plaster: no priming necessary Gypsum / Plasterboard / Medium Density: one coat of QUARTZ PRIMER</p> <p><u>Old Wall Surface</u> Plaster: one coat of QUARTZ PRIMER Fast drying / Limewash: brush down and apply one coat of QUARTZ PRIMER Polished Lime: Abrade, brush down and apply one coat of QUARTZ PRIMER Washable Paint: one coat of QUARTZ PRIMER</p>
Dilution	The product must be diluted with clean water to obtain a paste that is easily applied. Average dilution is 5.3 L of water per 16 kg of products, which is 330 ml per every kilogram of powder.
Consumption	1.3- 1.5 kg /sqm after three coats
Drying	<p>3 hours at 20°C / 68°F to the touch</p> <p>48 hours at 20°C / 68°F below the surface</p> <p>180 days stable</p>
Application temperatures	min 5 max 30°C – R.U. < 85% ca
Coat Thickness	1.1 – 1.6 mm after a total of 3 coats
VOC Classification	EU Directive 2004/42/CE: EU limit value for this product (cat A/I – water-based decorative effect coating): 200 g/l (2010). This product contains less than 1 g/l of VOC.
Specific Weight	1.4 ± 0.2 (kg/l)

pH after 30 days	12.5 ± 0.50
Vapour Permeability	SD ~ 0,04 m (DIN 52 615)
Flammability	European Class of Reaction to Fire A1: non-combustible, no contribution to fire
Mould Resistance	ASTM D 3274 – “Standard Test Method to evaluate the degree of surface disfigurement of paint by microbial, fungal and algae growth. Result: Front Panel 10/10/10 Back Panel 10/10/10 = no growth
Scrub Test Resistance	ASTM D 2486-06 method A = was used: scrubbing fine sand + metallic brush for 10,000 cycles
Impact Test	UNI EN ISO 6272-2-2006. 1 kg doming punch was dropped from different heights and only at the height of 8 cm., it left a 5.5 mm. dent in the surface and a tiny crack appeared around its circumference.
Pencil Hardness	ASTM D3363- Pencil hardness 5H
Shore Hardness	Norm ASTM 2240 average
Adhesion	Norm UNI EN 13892-8 2004 average value = 2,0
Shelf life	18 months when stored according to the recommended guidelines
Storage	In original sealed packaging between 5° - 35°C in a dry, dark environment
Safety Norms	Irritating. / Risk of serious damage to eyes. / Irritating to the skin. / Keep out of children. / Avoid contact with eyes. / In case of contact with eyes, clean immediately with water without rubbing them, and consult a doctor. / Wear suitable gloves and eyes / face protection. / In case of ingestion of the products, consult immediately a doctor showing him the can or the label of the product. Danger labelling under directives 67/548/EEC and 1999/45/EC nd following amendments and adjustments. The product must be transported, used and stored according to current standards of hygiene and safety.
Disposal	Product must be disposed of according to norms and regulations in force. Containers must be sent for recycling. Follow directions on the packaging
Application Instructions	<p>WARNINGS</p> <p>Dilute the material with clean water in the above-described ratio, mix well. Choose the colour and add the toner additive to the container and continue mixing until a homogeneous shade is obtained. Let the product rest for about 5 hours before you begin to use it.</p> <p>We recommend using materials from the same production batch for the same project. If you must use different batches, we suggest mixing their material together to avoid any slight variations in shading.</p> <p>To ensure proper usage, dilution, and application of the products mentioned in these pages, please consult the corresponding technical data sheets.</p> <p>When preparing the surface and applying the materials, we advise using appropriate tools and personal protective equipment (PPE).</p> <p>During application and for the following 72 hours, protect the surfaces from sudden temperature change, direct sun light and water. Don't apply in temperatures below 8°C or above 35°. During application make sure that the work area isn't too damp to avoid problems with application times.</p>

Remember to have a strong light parallel to the wall and situated on only one of the two sides of the wall you are working on (usually on the same side as other sources of light such as windows). In this way the shadow of the trowel allows you to see the actual state of the finish. Every so often, during the second and third coat, the light should be moved so that the wall doesn't dry out too much in one spot from the heat of the lamp.

APPLICATION

Protection of the work area: Masking tape and protective material over the baseboards and around windows and doors.

MARMORINO MEDIUM should be applied to plaster (rough or smooth, new, or not insulated). Already painted surfaces require a thorough brushing down to remove dust and uneven parts. Where necessary, use a brush or roller to apply a coat of QUARTZ PRIMER diluted with water up to about 30% in volume to be used, ca. 150-200 gm/sqm, or UNIVERSAL PRIMER diluted 1 to 7/8 with water. Apply at least three coats of MARMORINO MEDIUM with a steel trowel.

1) First coat of MARMORINO MEDIUM: use approx. 800 g/sqm. This coat is applied directly to the plaster, taking care to apply it evenly so as to smooth out any imperfections in the ground. This coat must not be polished or you will face problems of low adhesion or detached product when applying the final coat.

2) Second coat of MARMORINO MEDIUM: Begin applying only after the first coat is dry. Use approx. 800 g/sqm, taking care that the surface is as smooth and ridges-free as possible, but **DO NOT POLISH** as this will cause problems for the adhesion of the final finish coat.

3) Third coat of MARMORINO MEDIUM: Use approx. 300 g/sqm. Apply before the second coat is completely dry, that is **WET INTO WET**, so that the granules of marble penetrate the previously applied coat. After this, proceed with the final smoothing and polishing. For greater polish, go over the surface repeatedly with a trowel.

EXTERIORS: For exterior applications there are some rules to respect and some precautions to take. We remind you that carbonation, i.e. the process that takes place through the absorption of atmospheric CO₂, is completed in a few hours on the surface but takes several days to take place in depth. It is therefore important that the application takes place in the certainty of the absence of heavy rains in the three following days. It is also not recommended to apply it on walls that do not have at least a small roof overhang. Penetrating rain could ruin the finish even after weeks as deep carbonation is completed after more than a month. Avoid windy days, especially at high temperatures, as well as the risk of frost in the 48 hours following application. In external applications in hot climate conditions, it is also recommended to protect the wall from the sun with shade cloths applied to the scaffolding. Lime-based products must dry slowly to better fulfil their characteristics.

Finish Protection

INTERIOR: BEESWAX / MINERAL WAX / MARSEILLE SOAP / HYDROCALCE

EXTERIOR: MARSEILLE SOAP / HYDROCALCE

 WET AREAS: PU1C

A protective treatment is optional in most circumstances. It is however necessary in bathroom walls, kitchen and splashback walls, and a must inside shower/sauna walls. On exteriors, protective treatments are obligatory only in highly polluted cities.

Interiors

After a minimum of 48 hours, at least one coat of the following can be applied:

- A) MARSEILLE SOAP protective coating with a steel trowel. After 48 hours, go over the surface with a cloth to remove the coat of surface powder produced by unabsorbed soap.
- B) BEESWAX WAX applied with a sponge. After a little while, before it dries, rub vigorously with a woollen or soft cloth to obtain an even polish.
- C) MINERAL WAX applied with a sponge. After a little while, before it dries, rub vigorously with a woollen or soft cloth to obtain an even polish.

Exteriors

This finish, as all lime-based plasters, absorbs water during rainy weather, which results in a temporary "wet effect" on the surface. However, this plaster releases the absorbed water within a few hours, allowing the surface to dry without any damage nor alteration to the finish. While a final treatment is therefore optional, it is highly recommended in areas with high pollution levels or if you wish to avoid the temporary wet effect that can occur after rainfall. To protect the finish, after at least 72 hours at a minimum of 20°C, proceed with a colourless, penetrating HYDROCALCE, developed to protect exterior plaster coverings.

Maintenance	No special work is required in maintenance, just remove the dust periodically and re-wax it after 5 or 6 years. Protect the coating from any contact with liquid either rain or continuous water flowing down the wall. If any liquid such as coffee is spilled on the surface, clean immediately.
Tools	SI TROWEL / BIANCO, SCRAPERS, CORNER TROWEL, NON-WOVEN FABRIC Clean with water immediately after use
Complements	TERRACOTTA MEDIUM / MOTHER OF PEARL / MILLED MARBLE / MICA / GLITTER / EBANO POWDER / METALLIC BEESWAX / PERLA WAX

We have drawn up the material presented above to the best of our technical and experiential knowledge. Nevertheless, our suggestions and recommendations are not guaranteed. All responsibility for the obtained results lies solely with the method and conditions adopted for the application of the product. Such indications constitute valid support for verifying the product's suitability for the specific case. We reserve the right to make modifications to the present information without previous warning.